

REMARKS**Claim Rejections Under 35 U.S.C. § 102**

Claims 1, 3, 4, 6, 11, 13-17 and 19-21 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Yuan et al.* (U.S. Patent No. 6,762,092). Applicant respectfully traverses this rejection.

Yuan et al. neither teaches nor suggests any pillar-like structures having a source/drain region formed in the top as claimed in the present claims. The source and drain regions 449, 451 of *Yuan et al.* are implanted in the substrate 445 as shown in Figure 25A and discussed at col. 16, lines 20 – 24.

Claims 1 and 21 have been amended to include the limitations of claims 2 and 22, respectively. Claims 2 and 22 have been canceled without prejudice. Dependent claims 3, 4, and 6 now depend from allowable claims. Therefore, Applicant believes that these claims are also allowable.

Claim 17 has been amended to include the allowable subject matter of claim 2. Applicant believes that this claim and dependent claims 18 – 20 are now in condition for allowance.

Independent claims 11 and 14 already claim vertical NROM memory cells or a computer system comprising vertical NROM memory cells that have oxide pillars with source/drain regions formed in the tops of the pillars. Each claim includes an element that reads “a plurality of oxide pillars each having a source/drain region formed at the top”. This is neither taught nor suggested by *Yuan et al.*.

Claim Rejections Under 35 U.S.C. § 103

Claims 8-10, 12 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yuan et al.* (U.S. Patent No. 6,762,092) in view of *Chien et al.* (U.S. Patent No. 6,069,042). Applicant respectfully traverses this rejection.

Neither *Yuan et al.* nor *Chien et al.* teach or suggest Applicant’s claimed invention including a source/drain region formed at the tops of the oxide pillars. Both *Yuan et al.* and *Chien et al.* disclose forming the source and drain regions in the substrate. Therefore, even if it were obvious to combine these two references, the combination would not teach or suggest Applicant’s invention as claimed in independent claim 8 that includes “a plurality of oxide pillars each having a source/drain region formed at the top”.

Allowable Subject Matter

Claims 2, 5, 7 and 22-25 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. Applicant has amended claims 1 and 21 to include the allowable subject matter of respective claims 2 and 22. The dependent claims now depend upon allowable claims. Applicant thus respectfully requests reconsideration and withdrawal of the objection, and allowance of claims 1, 5, 7, 21, and 23 – 25.

CONCLUSION

For the above-cited reasons, Applicant respectfully requests that the Examiner withdraw the final rejection and allow the claims of the present application. If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2211. No new matter has been added and no additional fee is required by this amendment and response.

Respectfully submitted,

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